20

25

## What is claimed is:

A method of reducing flicker from a display presenting an interlaced image comprising filtering an adjustment pixel to reduce a flicker energy of said adjustment pixel to an energy at least equal to a threshold flicker energy.

2 st

- 2. The method of claim 1 wherein said flicker energy is a function of an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel, a number of intensity transitions vertically displaced from said adjustment pixel, and a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel.
- The method of claim 2 wherein said function of said intensities of said
  adjustment pixel and said another pixel is a logarithm of a ratio of said intensities.
  - 4. The method of claim 2 wherein said function of said length of said approximately horizontal plurality of pixels comprises a ratio of a number of said pixels included in said plurality and said number of said pixels plus a constant.
  - 5. The method of claim 4 wherein said constant has a first value if said intensity of said adjustment pixel is greater than said intensity of said another pixel and a second value if said intensity of said adjustment pixel is less than said intensity of said another pixel.
    - 6. The method of claim 1 wherein said threshold flicker energy is adjustable by a user of said display.

7. The method of claim 1 further comprising the step of adjusting said filtering of said adjustment pixel in response to filtering applied to an earlier filtered adjustment pixel.

Sub 125 >8.

A method of reducing flicker from a display presenting an interlaced image comprising filtering a signal for an adjustment pixel to reduce a flicker contrast of said adjustment pixel to a contrast at least equal to a threshold flicker contrast.

of sam

10 9. The method of claim 8 wherein said flicker contrast is a function of an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel, a number of intensity transitions vertically displaced from said adjustment pixel, and a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel.

10. The method of claim 9 wherein said function of said intensities of said adjustment pixel and said another pixel is a ratio of the difference and the sum of said intensities of said adjustment pixel and said another pixel.

20

11. The method of claim 9 wherein said function of said length of said approximately horizontal plurality of pixels comprises a ratio of a number of said pixels included in said approximately horizontal plurality of pixels and said number of said pixels plus a constant.

25

12. The method of claim 11 wherein said constant has a first value if said intensity of said adjustment pixel is greater than said intensity of said another pixel and a second value if said intensity of said adjustment pixel is less than said intensity of said another pixel.

- 13. The method of claim 8 wherein said threshold flicker contrast is adjustable by a user of said display.
- The method of claim 8 further comprising the step of adjusting said filtering
  of said adjustment pixel in response to filtering applied to an earlier filtered adjustment pixel.

Sub 13.

A method of reducing flicker from a display presenting an interlaced image comprising:

10

(a) identifying an adjustment pixel in a plurality of pixels of approximately equal intensity and arrayed for approximately horizontal presentation on said display, said adjustment pixel having an intensity different from a background pixel vertically displaced from said adjustment pixel;

non

- 15
- (b) computing/a flicker energy of said adjustment pixel; and
- (c) selecting a filter to reduce said flicker energy of said adjustment pixel to an energy less than a threshold flicker energy for said adjustment pixel.

20 16. The method of claim 15 wherein said flicker energy is a function of said intensities of said adjustment pixel and said background pixel, a number of intensity changes in a vertical vicinity of said adjustment pixel and a number of pixels included in said plurality of pixels of approximately equal intensity.

25

17. The method of claim 16 wherein said function of said intensities of said adjustment pixel and said background pixel is a logarithm of a ratio of said intensities.

- 18. The method of claim 16 wherein said function of said number of pixels included in said plurality of pixels is a ratio of said number of pixels and the sum of said number of pixels and a constant.
- 5 19. The method of claim 18 wherein said constant is a first constant if said intensity of said adjustment pixel is greater than said intensity of said background pixel and a second constant if said intensity of said adjustment pixel is less than said intensity of said background pixel.
  - The method of claim 15 wherein said threshold flicker contrast is adjustable by a user of said display.
  - The method of claim 15 further comprising the step of adjusting said filtering of said adjustment pixel in response to filtering applied to an earlier filtered adjustment pixel.
    - 22. A method of reducing flicker of a display presenting an interlaced image comprising:
      - (a) identifying an adjustment pixel in a plurality of pixels of approximately equal intensity and arrayed for approximately horizontal presentation on said display, said adjustment pixel having an intensity different from an intensity of a background pixel vertically displaced from said adjustment pixel;
      - (b) computing a fligker contrast of said adjustment pixel; and
- 25 (c) selecting a filter to reduce said flicker contrast of said adjustment pixel to a contrast less than a threshold flicker contrast for said adjustment pixel.
- The method of claim 22 wherein said flicker contrast is a function of said intensities of said adjustment pixel and said background pixel, a number of

intensity changes in a vertical vicinity of said adjustment pixel and a number of pixels included in said plurality of pixels of approximately equal intensity.

- 5 24. The method of claim 23 wherein said function of said intensities of said adjustment pixel and said background pixel is a ratio of the difference and the sum of said intensities.
- The method of claim 23 wherein said function of said number of pixels
  included in said plurality of pixels is a ratio of said number of pixels and the sum of said number of pixels and a constant.
- The method of claim 25 wherein said constant is a first constant if said intensity of said adjustment pixel is greater than said intensity of said background pixel and a second constant if said intensity of said adjustment pixel is less than said intensity of said background pixel.
  - 27. The method of claim 22 wherein said threshold flicker contrast is adjustable by a user of said display.
    - The method of claim 22 further comprising the step of adjusting said filtering of said adjustment pixel in response to filtering applied to an earlier filtered adjustment pixel.
- 25 29. A method of reducing flickering of a horizontal intensity discontinuity on a display presenting an interlaced image comprising:
  - (a) computing a flicker energy for an adjustment pixel said flicker energy level being a function of a ratio of an intensity of said adjustment pixel and an intensity of a background pixel vertically adjacent to said adjustment pixel, a number of horizontal intensity discontinuities

15

25

in a vertical vicinity of said adjustment pixel, and a length of said horizontal intensity discontinuity;

- (b) comparing said flicker energy level to a threshold flicker energy; and
- (c) filtering a signal for said adjustment pixel to reduce said flicker energy to an energy at least equal to said threshold flicker energy.

30. A method of reducing flickering of a horizontal intensity discontinuity on a display presenting an interlaced image comprising:

- (a) computing a flicker contrast for an adjustment pixel said flicker contrast level being a function of a ratio of the difference of an intensity of said adjustment pixel and an intensity of a background pixel vertically displaced from said adjustment pixel and a sum of said intensities, a number of horizontal intensity discontinuities in a vertical vicinity of said adjustment pixel, and a length of said horizontal intensity discontinuity;
- (b) comparing said flicker contrast; and
- (c) filtering a signal for said adjustment pixel to reduce said flicker contrast to a contrast at least equal to said threshold flicker contrast.
- 20 31. A method of reducing flicker on a display presenting an interlaced image comprising the steps of:
  - (a) selecting an adjustment pixel of said image; and
  - (b) applying a filter to at least said adjustment pixel said filter being adjusted, at least in part, on the basis of at least one of;
    - (i) a function of an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel;
    - displaced from said adjustment pixel; and

M

-16-

Asnel

- (iii) a function of a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel.
- 5 32. The method of claim 31 wherein said function of said intensities of said adjustment pixel and said another pixel is a logarithm of a ratio of said intensities.
- The method of claim 31 wherein said function of said intensities of said adjustment pixel and said another pixel is a ratio of the difference and the sum of said intensities.
  - 34. The method of claim 31 wherein said function of said length of said approximately horizontal plurality of pixels comprises a ratio of a number of said pixels included in said plurality and said number of said pixels plus a constant.
- The method of claim 34 wherein said constant has a first value if said intensity of said adjustment pixel is greater than said intensity of said another pixel and a second value if said intensity of said adjustment pixel is less than said intensity of said another pixel.
  - 36. The method of claim 31 wherein said filter is further adjustable by a user of said display.
  - 37. The method of claim 31 wherein said filter is further adjustable as a function of filtering applied to an earlier filtered adjustment pixel.

A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

(a) selecting an adjustment pixel of said image; and

30 38.

Revelo

applying a filter to at least said adjustment pixel said filter being adjusted, at least in part, or the basis of a function an intensity of said adjustment pixel and an intensity of another pixel vertically displaced from said adjustment pixel.

N. Sum

5

39. The method of claim 38 wherein said function of said intensities of said adjustment pixel and said another pixel is a logarithm of a ratio of said intensities.

Sut A10>40.

The method of claim 38 wherein said function of said intensities of said adjustment pixel and said background pixel is a ratio of the difference and the sum of said intensities.

15

41. A method of reducing flicker on a display presenting an interlaced image comprising the steps of:

(a) selecting an adjustment pixel of said image; and

(b) applying a filter to at least said adjustment pixel, said filter being adjusted, at least in part, on the basis of a function of a number of intensity transitions vertically displaced from said adjustment pixel.

20

- 42. A method of reducing flicker on a display presenting an interlaced image comprising the steps of:
  - (a) selecting an adjustment pixel of said image; and

(b) applying a filter to at least said adjustment pixel said filter being adjusted, at least in part, on the basis of a function of a length of an approximately horizontal plurality of pixels of approximately equal intensity including said adjustment pixel.

25

30

43. The method of claim 41 wherein said function of said length of said approximately horizontal plurality of pixels comprises a ratio of a number of

L.A

And

said pixels included in said plurality and said number of said pixels plus a constant.

The method of claim 43 wherein said constant has a first value if an intensity of said adjustment pixel is greater than an intensity of another pixel vertically adjacent to said adjustment pixel and a second value if said intensity of said adjustment pixel is less than said intensity of said another pixel.

odd As -